

Ser. No.:10/516,859  
Amtd. dated August 14, 2008  
Reply to Office Action of May 29, 2008

PATENT  
PU020269  
Customer No. 24498

Remarks/Arguments

The Office Action mailed on November 16, 2007 has been reviewed and carefully considered. Claims 1, 7 and 12 have been amended. No new matter has been added. Claims 1-17 are currently pending in this application.

Reconsideration of the above-identified application, as herein amended and in view of the following remarks, is respectfully requested. It should be noted that the Applicant is not conceding in this application that the amended claims in their prior form are not patentable over the art cited by the Examiner, as the present claim amendments have been made only to facilitate expeditious prosecution of the application. The Applicant respectfully reserves the right to pursue these and other claims in one or more continuation and/or divisional patent applications.

Claim rejections:

Claims 1, 2, 5-7, 10-13, 16 and 17 currently stand rejected under 35 U.S.C. §103(a) in view of United States Patent No. 4,940,951 to Sakamoto (hereinafter 'Sakamoto') and United States Patent No. 6,075,829 Hayashi et al. (hereinafter 'Hayashi')

Claim 1 recites:

Apparatus comprising:  
a receiver for receiving an audio file signal;  
a decoder for demodulating said audio file signal; and  
a processor configured to poll said decoder for a loss of a phase lock loop in said demodulating of said audio file signal to detect audio file signal loss between the receiver and a transmitter, wherein the processor is further configured to, in response to said loss in said phase lock loop, automatically reset and reinitialize said decoder throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established.

It is respectfully submitted that Sakamoto and Hayashi, taken singly or in combination, fail to disclose or render obvious the feature of responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established. Sakamoto discloses detecting the loss of a phase lock and recovering a phase locked loop (PLL) by sweeping the frequency of an oscillator (see, e.g., Sakamoto column 3, line 58 to column 4, line 5). However,

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Sakamoto discloses that an input signal is received while the sweep is performed and the PLL is recovered (see, e.g., Sakamoto, column 4, lines 1-5). Furthermore, Sakamoto provides no details concerning whether or for how long the sweep is performed during a period of transmission idleness at a transmitter source. Thus, Sakamoto nowhere discloses or remotely suggests that a decoder is reset and reinitialized throughout a period of transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established.

Moreover, Hayashi fails to cure the deficiencies of Sakamoto. Hayashi is directed to improving automatic frequency control and a bit error rate (see, e.g., Hayashi, column 2, lines 56-61). Although Hayashi describes the use of PLL synthesizer, Hayashi does not disclose or render obvious the feature of responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established.

In contrast to Sakamoto and Hayashi, one or more implementations of the present principles are directed to permitting seamless playing of audio files at a wireless receiver after long periods of transmission idleness from a transmission source (see, e.g., Specification, p. 1, line 27 to p. 2, line 5). In prior art systems, users were required to manually re-establish a phase lock loop at a receiver after long periods of idleness (see, e.g., Specification, p. 1, line 29 to p. 2, line 2). According to one aspect of the present principles, a loss of a phase lock loop may be detected and a decoder may be automatically reset and reinitialized during long periods of idleness at a transmitter until a transmission signal is received and a phase lock loop is established, thereby enabling seamless playing of audio files without user-intervention (see, e.g., Specification, FIG. 3, steps 31-33, FIG. 3; p. 5, lines 17-24; p. 1, line 27 to p. 2, line 5).

As discussed above, neither Sakamoto nor Hayashi, taken singly or in combination disclose or render obvious at least the feature of responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established. Accordingly, claim 1 is believed to be patentable over Sakamoto and Hayashi. Further, claims 2, 5 and 6 are believed to be patentable due at least to their dependencies from claim 1.

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Similarly, claims 7 and 12 are believed to be patentable over Sakamoto and Hayashi. Claim 7 recites, inter alia: "automatically resetting and reinitializing said demodulating in response to said loss in said phase lock loop throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established . . ." In addition, claim 12 recites, inter alia: "automatically resetting and reinitializing said decoding in response to said loss in said phase lock loop throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established." As discussed above, Sakamoto and Hayashi fail to disclose or render obvious responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established. Thus, claims 7 and 12 are believed to be patentable over the cited references. Moreover, claims 10-13, 16 and 17 are believed to be patentable due at least to their dependencies from claims 7 and 12. As such, withdrawal of the rejection is respectfully requested.

Claims 3, 9 and 14 stand rejected as being unpatentable over Sakamoto as modified by Hayashi in view of United States Patent No. 6,466,832, to Zuzert et al. (hereinafter 'Zuzert').

Due to the dependencies of claim 3, 9 and 14 from claims 1, 7 and 9, respectively, claims 3, 9 and 14 include the feature of responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder or a demodulator throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established. For at least the reasons discussed above, claims 3, 9 and 14 are believed to be patentable over Sakamoto and Hayashi. Additionally, combination of Sakamoto and/or Hayashi with Zuzert does not render claims 3, 9 and 14 obvious, as Zuzert fails to cure the deficiencies of Sakamoto and/or Hayashi.

Zuzert describes transmission of separate copies of data packets to ensure a suitable quality level of the packets upon its receipt at a receiver (see, e.g., Zuzert, Abstract). While the Zuzert system discloses using a phase lock loop to lock on to transmission frequencies (see, e.g., Zuzert, column 18, lines 12-25), Zuzert does not disclose or render obvious responding to a loss of a phase lock loop by automatically

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resetting and reinitializing a decoder or a demodulator throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established, as included in claims 3, 9 and 14. Thus, claims 3, 9 and 14 are believed to be patentable over Sakamoto, Hayashi and Zuqert, taken singly or in any combination.

Claims 4 and 15 stand rejected as being unpatentable over Sakamoto as modified by Hayashi in view of United States Patent No. 6,389,548, to Bowles (hereinafter 'Bowles').

Due to the dependencies of claim 4 and 15 from claims 1 and 9, respectively, claims 4 and 14 include the feature of responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established. For at least the reasons discussed above, claims 4 and 15 are believed to be patentable over Sakamoto and Hayashi. Furthermore, combination of Sakamoto and/or Hayashi with Bowles does not render claims 4 and 14 obvious, as Bowles fails to cure the deficiencies of Sakamoto and/or Hayashi.

Bowles is directed to a system and method for measuring a pulse run length in a high frequency data signal (see, e.g., Bowles, Abstract). Although Bowles discloses using a phase locked loop to track changes in variations of the HF signal caused by imperfections on a compact disc, such as fingerprints (see, e.g., Bowles, column 7, lines 16-23; column 7, lines 65-67), Bowles does not disclose or render obvious responding to a loss of a phase lock loop by automatically resetting and reinitializing a decoder or a demodulator throughout a period of signal transmission idleness at a transmitter source until a transmission signal is received and a phase lock loop is established, as included in claims 4 and 15. Thus, claims 4 and 15 are believed to be patentable over Sakamoto, Hayashi and Bowles, taken singly or in any combination.

In view of the foregoing, the Applicant respectfully requests that the rejections of the claims set forth in the Office Action of May 29, 2008 be withdrawn, that pending claims 1-17 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

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It is believed that no additional fees or charges are currently due. However, in the event that any additional fees or charges are required at this time in connection with the application, they may be charged to the Applicant's representatives Deposit Account No. 07-0832.

Respectfully submitted,  
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